

SEQUENCE LISTING

<110> Pan, Yang

<120> NOVEL MOLECULES OF THE TANGO-93-RELATED
PROTEIN FAMILY AND USES THEREOF

<130> 07334-369001

<140> US 10/134,410

<141> 2002-04-29

<150> US 09/131,263

<151> 1998-08-07

<150> US 09/369,693

<151> 1999-08-06

<160> 14

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1360

<212> DNA

<213> Mus musculus

<220>

<221> CDS

<222> (137)...(604)

<400> 1

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caaattttcc agccttgtct ttgcctaaaa ttctctgctg tttatttcaa aatagggctct      120
acatactgtg gagctc atg atg gtt ctg agt ggg gca cta tgc ttc cga atg      172
                Met Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met
                  1                5                10
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aag gat tca gcc ttg aag gta ctg tat ctg cac aat aac cag ctg ctg      220
Lys Asp Ser Ala Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu
              15                20                25
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gct gga gga ctg cac gca gag aag gtc att aaa ggt gag gag atc agt      268
Ala Gly Gly Leu His Ala Glu Lys Val Ile Lys Gly Glu Glu Ile Ser
              30                35                40
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gtt gtc cca aat cgg gca ctg gat gcc agt ctg tcc cct gtc atc ctg      316
Val Val Pro Asn Arg Ala Leu Asp Ala Ser Leu Ser Pro Val Ile Leu
              45                50                55                60
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ggc gtt caa gga gga agc cag tgc cta tct tgt ggg aca gag aaa ggg      364
Gly Val Gln Gly Gly Ser Gln Cys Leu Ser Cys Gly Thr Glu Lys Gly
              65                70                75
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cca att ctg aaa ctt gag cca gtg aac atc atg gag ctc tac ctc ggg      412
Pro Ile Leu Lys Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly
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80	85	90	
gcc aag gaa tca aag agc ttc acc ttc tac cgg cgg gat atg ggt ctt			460
Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu			
95	100	105	
acc tcc agc ttc gaa tcc gct gcc tac cca ggc tgg ttc ctc tgc acc			508
Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr			
110	115	120	
tca ccg gaa gct gac cag cct gtc agg ctc act cag atc cct gag gac			556
Ser Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln Ile Pro Glu Asp			
125	130	135	140
ccc gcc tgg gat gct ccc atc aca gac ttc tac ttt cag cag tgt gac			604
Pro Ala Trp Asp Ala Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp			
145	150	155	
tagggctgcg tgggtcccca aactccataa gcagaggcag agtaggcagt ggcggctcct			664
gatagaggat agagagacag aggagctcca cagtaggtgg cttactcctc tccttcctta			724
ctggactccc gcttctgacc taaggcacac agacactctc ttctcctgca tcccagtgt			784
ggtaaattctt ctggtatttg gagctcaatg tgtagattct ttcagattgg atggtactac			844
ctctggtgtg gaaccaata gaaaccacgt aggaccaaca aagagcaaca taaaagattc			904
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agtcttgcca ttcttatgt tctggagaaa gtggaggggg ggtcaccaag actttctctg			1024
gctggctggg ccctttccct caacctttct gacatctgca gcctctctca ttcttgctt			1084
cattctctgg ccctgaaccg agaggggtgat atcaggatag ctgacagaag atgaccaggc			1144
acactgtcct ggtttgaaac cagaggggac aataaaaaac cctgattctg gtctctactc			1204
acataaaaag aagcttgtga acattaagtg ggaagagatt gctactaaat aacatacctt			1264
ggaatttcat cttaattaaa atatacttct ctatattata tatttttaaaa aaaaaaaa			1324
aaaaaaaaa aaaaaaaaaa aaaaaacatg cggccg			1360

<210> 2

<211> 156

<212> PRT

<213> Mus musculus

<400> 2

Met Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala	
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Leu Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu	
20 25 30	
His Ala Glu Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn	
35 40 45	
Arg Ala Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly	
50 55 60	
Gly Ser Gln Cys Leu Ser Cys Gly Thr Glu Lys Gly Pro Ile Leu Lys	
65 70 75 80	
Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser	
85 90 95	
Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe	
100 105 110	
Glu Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Ser Pro Glu Ala	
115 120 125	
Asp Gln Pro Val Arg Leu Thr Gln Ile Pro Glu Asp Pro Ala Trp Asp	
130 135 140	
Ala Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp	

145	150	155	
<210> 3			
<211> 468			
<212> DNA			
<213> Mus musculus			
<400> 3			
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gaggagatca	gtgttgctcc	aaatcgggca	ctggatgcca gtctgtcccc tgtcatcctg 180
ggcggttcaag	gaggaagcca	gtgcctatct	tgtgggacag agaaagggcc aattctgaaa 240
cttgagccag	tgaacatcat	ggagctctac	ctcggggcca aggaatcaaa gagcttcacc 300
ttctaccggc	gggatatggg	tcttacctcc	agcttcgaat ccgctgccta ccagggtgg 360
ttcctctgca	cctcaccgga	agctgaccag	cctgtcaggc tcactcagat ccctgaggac 420
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<212> DNA			
<213> Homo sapiens			
<220>			
<221> CDS			
<222> (57)...(521)			
<400> 4			
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Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu Lys			
	5	10	15
gtg ctt tat ctg cat aat aac cag ctt cta gct gga ggg ctg cat gca 155			
Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu His Ala			
	20	25	30
ggg aag gtc att aaa ggt gaa gag atc agc gtg gtc ccc aat cgg tgg 203			
Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg Trp			
	35	40	45
ctg gat gcc agc ctg tcc ccc gtc atc ctg ggt gtc cag ggt gga agc 251			
Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly Ser			
	50	55	60
cag tgc ctg tca tgt ggg gtg ggg cag gag ccg act cta aca cta gag 299			
Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu Glu			
	70	75	80
cca gtg aac atc atg gag ctc tat ctt ggt gcc aag gaa tcc aag agc 347			
Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys Ser			
	85	90	95
ttc acc ttc tac cgg cgg gac atg ggg ctc acc tcc agc ttc gag tcg 395			
Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu Ser			

100	105	110	
gct gcc tac ccg ggc tgg ttc ctg tgc acg gtg cct gaa gcc gat cag			443
Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp Gln			
115	120	125	
cct gtc aga ctc acc cag ctt ccc gag aat ggt ggc tgg aat gcc ccc			491
Pro Val Arg Leu Thr Gln Leu Pro Glu Asn Gly Gly Trp Asn Ala Pro			
130	135	140	145
atc aca gac ttc tac ttc cag cag tgt gac tagggcaacg tgccccccag			541
Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp			
150	155		
aactccctgg gcagagccag ctcggtgag ggggtgagtgg aggagacca tggcggacaa			601
tcactctctc tgctctcagg acccccacgt ctgacttagt gggcacctga ccactttgtc			661
ttctggttcc cagtttggat aaattctgag atttgagct cagtccacgg tcctcccca			721
ctggatggtg ctactgctgt ggaaccttgt aaaaaccatg tggggtaaac tgggaataac			781
atgaaaagat ttctgtgggg gtggggtggg ggagtgggtg gaatcattcc tgcttaatgg			841
taactgacaa gtgttaccct gagccccgca ggccaaccca tccccagttg agccttatag			901
ggtcagtagc tctccacatg aagtcctgtc actcaccact gtgcaggaga gggaggtggt			961
catagagtca gggatctatg gcccttggcc cagccccacc cccttccctt taatcctgcc			1021
actgtcatat gctacctttc ctatctcttc cctcatcatc ttgttgtggg catgaggagg			1081
tggtgatgtc agaagaaatg gctcgagctc agaagataaa agataagtag ggtatgctga			1141
tcctctttta aaaacccaag atacaatcaa aatcccagat gctggtctct attcccatga			1201
aaaagtgtc atgacatatt gagaagacct acttaciaaag tggcatatat tgcaatttat			1261
tttaattaaa agatacctat ttatatattt ctttataaaa aaaaaaaaaa aagggcggcc			1321
gc			1323

<210> 5

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5

Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu			
1	5	10	15
Lys Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu His			
20	25	30	
Ala Gly Lys Val Ile Lys Gly Glu Ile Ser Val Val Pro Asn Arg			
35	40	45	
Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly			
50	55	60	
Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu			
65	70	75	80
Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys			
85	90	95	
Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu			
100	105	110	
Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp			
115	120	125	
Gln Pro Val Arg Leu Thr Gln Leu Pro Glu Asn Gly Gly Trp Asn Ala			
130	135	140	
Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp			
145	150	155	

<210> 6

<211> 465
 <212> DNA
 <213> Homo sapiens

<400> 6
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 gagatcagcg tgggtcccaa tcggtggctg gatgccagcc tgtcccccgt catcctgggt 180
 gtccaggggtg gaagccagtg cctgtcatgt ggggtggggc aggagccgac tctaactacta 240
 gagccagtga acatcatgga gctctatctt ggtgccaagg aatccaagag cttcaccttc 300
 taccggcggg acatggggct cacctccagc ttcgagtcgg ctgcctaccc gggctgggtc 360
 ctgtgcacgg tgcctgaagc cgatcagcct gtcagactca cccagcttcc cgagaatggt 420
 ggctggaatg ccccatcac agacttctac ttccagcagt gtgac 465

<210> 7
 <211> 177
 <212> PRT
 <213> Homo sapiens

<400> 7
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 Phe Leu Phe His Ser Glu Thr Ile Cys Arg Pro Ser Gly Arg Lys Ser
 20 25 30
 Ser Lys Met Gln Ala Phe Arg Ile Trp Asp Val Asn Gln Lys Thr Phe
 35 40 45
 Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln Gly Pro Asn
 50 55 60
 Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu Pro His Ala
 65 70 75 80
 Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser Cys Val Lys
 85 90 95
 Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Ala Val Asn Ile Thr Asp
 100 105 110
 Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg Ser
 115 120 125
 Asp Ser Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly Trp
 130 135 140
 Phe Leu Cys Thr Ala Met Glu Ala Asp Gln Pro Val Ser Leu Thr Asn
 145 150 155 160
 Met Pro Asp Glu Gly Val Met Val Thr Lys Phe Tyr Phe Gln Glu Asp
 165 170 175
 Glu

<210> 8
 <211> 178
 <212> PRT
 <213> Mus musculus

<400> 8
 Met Glu Ile Cys Trp Gly Pro Tyr Ser His Leu Ile Ser Leu Leu Leu
 1 5 10 15
 Ile Leu Leu Phe His Ser Glu Ala Ala Cys Arg Pro Ser Gly Lys Arg
 20 25 30
 Pro Cys Lys Met Gln Ala Phe Arg Ile Trp Asp Thr Asn Gln Lys Thr
 35 40 45

Phe Tyr Leu Arg Asn Asn Gln Leu Ile Ala Gly Tyr Leu Gln Gly Pro
 50 55 60
 Asn Ile Lys Leu Glu Glu Lys Ile Asp Met Val Pro Ile Asp Leu His
 65 70 75 80
 Ser Val Phe Leu Gly Ile His Gly Gly Lys Leu Cys Leu Ser Cys Ala
 85 90 95
 Lys Ser Gly Asp Asp Ile Lys Leu Gln Leu Glu Glu Val Asn Ile Thr
 100 105 110
 Asp Leu Ser Lys Asn Lys Glu Glu Asp Lys Arg Phe Thr Phe Ile Arg
 115 120 125
 Ser Glu Lys Gly Pro Thr Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly
 130 135 140
 Trp Phe Leu Cys Thr Thr Leu Glu Ala Asp Arg Pro Val Ser Leu Thr
 145 150 155 160
 Asn Thr Pro Glu Glu Pro Leu Ile Val Thr Lys Phe Tyr Phe Gln Glu
 165 170 175
 Asp Gln

<210> 9
 <211> 13
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated primer

<400> 9
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13

<210> 10
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated primer

<400> 10
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17

<210> 11
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetically generated primer

<400> 11
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16

<210> 12
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Synthetically generated primer

<400> 12

ggtctaccag gactca

16

<210> 13

<211> 2490

<212> DNA

<213> Homo sapiens

<400> 13

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atctgcataa	taaccagctt	ctagctggag	ggctgcatgc	aggggaaggc	attaaagggtg	180
aagagatcag	cgtggtcccc	aatcgggtggc	tggatgccag	cctgtccccc	gtcatcctgg	240
gtgtccaggg	tgaagccag	tgctgtcat	gtgggggtggg	gcaggagccg	actctaacac	300
tagagccagt	gaacatcatg	gagctctatc	ttgggtgccaa	ggaatccaag	agcttcacct	360
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tcctgtgcac	ggtgcctgaa	gccgatcagc	ctgtcagact	caccagctt	cccgagaatg	480
gtggctggaa	tgcccccatc	acagacttct	acttcagca	gtgtgactag	ggcaacgtgc	540
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cccatgaaaa	agtgtcatg	acatattgag	aagacctact	tacaaagtgg	catatattgc	1260
aattttat	aattaaaaga	tacctattta	tatatctctt	tatagaaaaa	agtctggaag	1320
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<210> 14

<211> 155

<212> PRT

<213> Homo sapiens

<400> 14

Met	Val	Leu	Ser	Gly	Ala	Leu	Cys	Phe	Arg	Met	Lys	Asp	Ser	Ala	Leu
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		20						25					30		
Ala	Gly	Lys	Val	Ile	Lys	Gly	Glu	Glu	Ile	Ser	Val	Val	Pro	Asn	Arg
		35					40					45			
Trp	Leu	Asp	Ala	Ser	Leu	Ser	Pro	Val	Ile	Leu	Gly	Val	Gln	Gly	Gly
	50					55					60				
Ser	Gln	Cys	Leu	Ser	Cys	Gly	Val	Gly	Gln	Glu	Pro	Thr	Leu	Thr	Leu
65					70				75						80
Glu	Pro	Val	Asn	Ile	Met	Glu	Leu	Tyr	Leu	Gly	Ala	Lys	Glu	Ser	Lys
			85						90					95	
Ser	Phe	Thr	Phe	Tyr	Arg	Arg	Asp	Met	Gly	Leu	Thr	Ser	Ser	Phe	Glu
			100					105						110	
Ser	Ala	Ala	Tyr	Pro	Gly	Trp	Phe	Leu	Cys	Thr	Val	Pro	Glu	Ala	Asp
		115					120					125			
Gln	Pro	Val	Arg	Leu	Thr	Gln	Leu	Pro	Glu	Asn	Gly	Gly	Trp	Asn	Ala
	130					135					140				
Pro	Ile	Thr	Asp	Phe	Tyr	Phe	Gln	Gln	Cys	Asp					
145					150					155					